

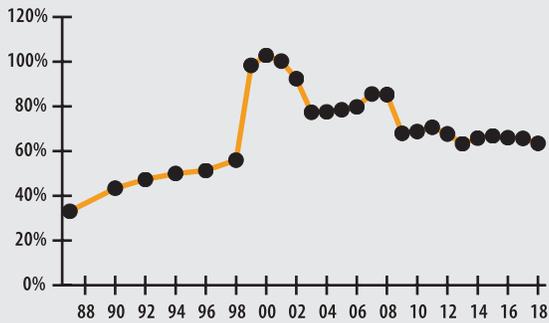
Worcester

City Hall, Room 103
455 Main Street
Worcester, MA 01608
Phone 508-799-1062
Fax 508-799-1047

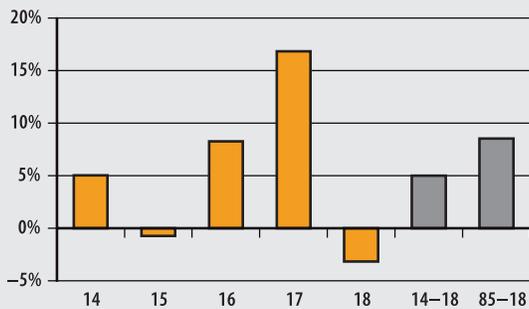
Board Members
Robert Stearns, Stephen Wentzell*,
John Mahan, Elizabeth Early,
Tamara Cullen
*indicates Chairperson

Board Administrator
Elizabeth Early
Board Meeting
Second Thursday of month at 8:30 am

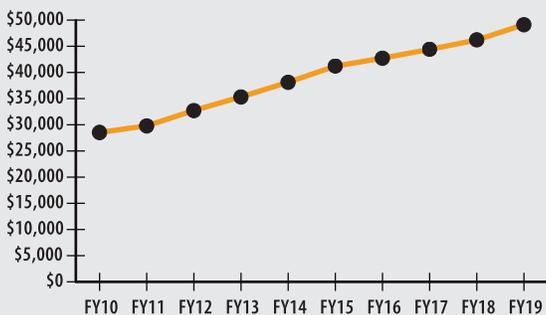
FUNDED RATIO (1987-2018)



INVESTMENT RETURN (2014-2018, 5 YEAR AND 34 YEAR AVERAGES)



10-YEAR HISTORY OF APPROPRIATIONS (IN THOUSANDS)



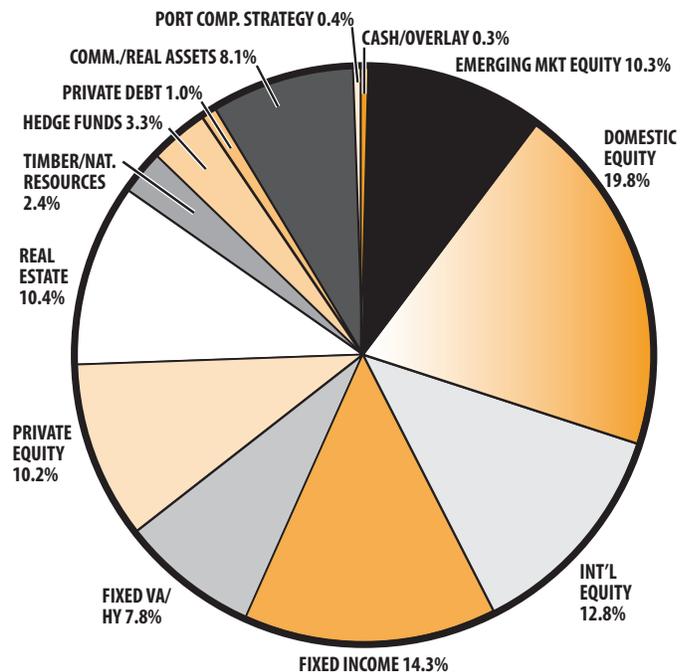
INVESTMENT RETURN HISTORY

<u>34 years 2018</u>	<u>33 years 2017</u>	<u>32 years 2016</u>
8.56%	8.93%	8.69%
<u>10 years 2018</u>	<u>10 years 2017</u>	<u>10 years 2016</u>
8.44%	5.38%	4.66%
<u>5 years 2018</u>	<u>5 years 2017</u>	<u>5 years 2016</u>
5.03%	8.32%	7.85%

ACTUARIAL

▶ Funded Ratio	63.5%	
▶ Date of Last Valuation	1/1/18	
▶ Actuary	Segal	
▶ Assumed Rate of Return	7.00%	
▶ Funding Schedule	6.33% Total Increasing	
▶ Year Fully Funded	2034	
▶ Unfunded Liability	\$534.1 M	
▶ Total Pension Appropriation (Fiscal 2019)	\$49.1 M	
	ACTIVE	RETIRED
▶ Number of Members	3,455	2,707
▶ Total Payroll/Benefit	\$186.8 M	\$80.1 M
▶ Average Salary/Benefit	\$54,100	\$29,600
▶ Average Age	46	74
▶ Average Service	12.8 years	NA

ASSET ALLOCATION (12/31/18)



EARNED INCOME OF DISABILITY RETIREES (2017)

▶ Number of Disability Retirees	317
▶ Number Who Reported Earnings	72
▶ Number of Excess Earners	2
▶ Total Amount of Refund Due	\$21,360.44

▶ 2018 Return	-3.16%
▶ 2018 Market Value	\$904.5 M
▶ 2014-2018 (Annualized)	5.03%
▶ 1985-2018 (Annualized)	8.56%